

CLAIM AMENDMENTS

Claim 1. (original) A method for controlling power consumption during a rock drilling process with a rock drilling apparatus, wherein the rock drilling apparatus includes main power supply means for supplying power for the rock drilling process, which includes at least the sub-processes of percussion and/or rotation and flushing, the method comprising the steps of:

- adjusting the flush power at least partly as a function of hole depth, and

- controlling at least the percussion power and/or rotational power and the flush power such that the total power consumption of each sub-process is controlled.

Claim 2. (original) Method according to claim 1, characterized in that the flush power further is adjusted at least partly as a function of hole diameter and/or diameter of the drill rod.

Claim 3. (currently amended) Method according to claim 1 ~~or 2~~, characterized in that the total power consumption of each sub-process is controlled such that the power output from the main power supply means is kept at or below a predetermined level.

Claim 4. (currently amended) Method according to Claim 1 ~~any of the claims 1-3~~ , characterized in that the flow of the flush medium is kept substantially constant throughout the drilling process.

Claim 5. (currently amended) Method according to Claim 1 ~~any of the claims 1-3~~ , characterized in that the flow of the flush medium is increased with increasing hole depth.

Claim 6. (currently amended) Method according to Claim 1 ~~any of the claims 1-5~~ , characterized in that the hole depth is continuously measured.

Claim 7. (currently amended) Method according to Claim 1 ~~any of the claims 1-6~~ , characterized in that the flow of the flush medium is continuously measured.

Claim 8. (currently amended) Method according to Claim 1 ~~any of the claims 1-7~~ , characterized in that the required flush power is determined by computer means.

Claim 9. (original) Method according to claim 8, characterized in that the computer means is connected to a memory in which is stored a table comprising one or more lists at least partly including type of drill tool and/or type of drill rod and/or hole depth and that the flush power is determined based on stored values.

Claim 10. (currently amended) Method according to Claim 1 ~~any of the claims 1 - 3~~, characterized in that percussion is performed by a hydraulic top hammer.

Claim 11. (original) System for controlling power consumption during a rock drilling process with a rock drilling apparatus, wherein the rock drilling apparatus includes main power supply means for supplying power for the rock drilling process, which includes at least the sub-processes of percussion and/or rotation and flushing, the system comprising:

- means for adjusting the flush power at least partly as a function of hole depth, and

- means for controlling at least the percussion power and/or rotational power and the flush power such that the total power consumption of each sub-process is controlled.

Claim 12. (original) System according to claim 11, characterized in that it further includes means for adjusting the flush power at least partly as a function of hole diameter and/or diameter of the drill rod.

Claim 13. (currently amended) System according to claim 11 ~~or 12~~, characterized in that the system is arranged to control the total power consumption of each sub-process such that the

power output from the main power supply means is kept at or below a predetermined level.

Claim 14. (currently amended) System according to Claim 11 ~~any of the claims 11-13~~ , characterized in that the system is arranged to keep the flow of the flush medium substantially constant throughout the drilling process.

Claim 15. (currently amended) System according to Claim 11 ~~any of the claims 11-13~~ , characterized in that the system is arranged to increase the flow of the flush medium with increasing hole depth.

Claim 16. (currently amended) System according to Claim 11 ~~any of the claims 11-15~~ , characterized in that the system is arranged to continuously measure the hole depth.

Claim 17. (currently amended) System according to Claim 11 ~~any of the claims 1-16~~ , characterized in that the system is arranged to continuously measure the flow of the flush medium.

Claim 18. (currently amended) System according to Claim 11 ~~any of the claims 11-17~~ , characterized in that the system is arranged to determine the required flush power by computer means.

Claim 19. (original) System according to claim 18, characterized in that the computer means is connected to a memory

arranged to store a table comprising one or more of lists at least partly including type of drill tool and/or type of drill rod and/or hole depth, and that the flush power is arranged to be determined based on stored values.

Claim 20. (currently amended) System according to Claim 11 ~~any of the claims 11 - 19~~, characterized in that percussion is arranged to be performed by a hydraulic top hammer.

Claim 21. (currently amended) Rock drill apparatus, characterized in that is arranged to include a system according to Claim 11 ~~any of the claims 11 - 20~~.

Claim 22. (new) Method according to Claim 2, characterized in that the total power consumption of each sub-process is controlled such that the power output from the main power supply means is kept at or below a predetermined level.

Claim 23. (new) System according to Claim 12, characterized in that the system is arranged to control the total power consumption of each sub-process such that the power output from the main power supply means is kept at or below a predetermined level.